

Safety Data Sheet (MSDS)

- M.T.G (Monoeth)

(According to GB/T 16483 and GB/T 17519; Adapts to GHS, IMDG, IATA Standards) **Revision**

Date: 22 FEB 2026

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifiers

- Product Name: M.T.G (Monoeth) (Thioglycolic Acid Derivative of Monoethanolamine Blend)
- Synonyms: Monoethanolamine Thioglycolate Complex; MTG Monoethanolamine Blend
- Product Number: MTG-20260222
- Brand: SIGALD
- CAS-No.: 126-97-6 (main component: Monoethanolamine); N/A (M.T.G complex)
- Form: Colorless to pale yellow transparent liquid
- Grade: Cosmetic Grade / Industrial Grade

1.2 Details of the supplier of the safety data sheet

- Company: NEWAY SINOPHC TECH. LIMITED
- Address: RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE
- Telephone: +86-021-50350029
- Fax: +86-021-50350029

1.3 Emergency telephone

- Emergency Phone #: +86-021-50350029 (24h Chemical Emergency Response) / CHEMTREC: +1-800-424-9300

1.4 Relevant Identified Uses and Uses Advised Against

- **Identified Uses:** Cosmetic raw material (pH adjuster/chelator); metal surface treatment corrosion inhibitor; textile printing and dyeing chelator; daily chemical emulsifier/pH adjuster; water treatment scale inhibitor.
- **Uses Advised Against:** Not for oral consumption; not for pharmaceutical/medical use; do not mix with strong acids/strong oxidants in high concentration; do not use as a food additive.

SECTION 2: Hazards Identification

2.1 GHS Classification

- Skin corrosion, Category 1B - H314
- Serious eye damage, Category 1 - H318
- Specific target organ toxicity - single exposure, respiratory tract irritation, Category 3 - H335

2.2 GHS Label Elements

- Hazard Pictogram: (Corrosive)
- Signal Word: **DANGER**

• Hazard Statements:

- H314: Causes severe skin burns and eye damage
- H318: Causes serious eye damage
- H335: May cause respiratory tract irritation

• Precautionary Statements:

- P260: Do not breathe mist/vapours/spray
- P264: Wash hands thoroughly after handling
- P280: Wear protective gloves/eye protection/face protection/protective clothing
- P301+P330+P331: If swallowed: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340: If inhaled: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P310: Immediately call a POISON CENTER or doctor/physician.
- P363: Wash contaminated clothing before reuse.
- P405: Store locked up.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Physical and Chemical Hazards

Non-flammable, non-explosive; alkaline corrosive liquid, corrosive to carbon steel, iron and concrete at high concentration; reacts violently with strong acids to produce heat; no

polymerization risk under normal conditions; decomposes at high temperature (>200°C) to produce ammonia gas and non-toxic organic compounds.

2.4 Health Hazards

Causes severe chemical burns to skin and irreversible eye damage; inhalation of mist causes respiratory tract irritation (cough, sore throat, chest tightness); massive ingestion causes gastrointestinal burns (abdominal pain, nausea, vomiting); no chronic toxic effects based on current data; no sensitization, carcinogenic or mutagenic effects.

2.5 Environmental Hazards

Low toxicity to aquatic organisms (LC₅₀ > 1000 mg/L for fish); fully biodegradable in natural environment (biodegradation rate >80% in 28d); no bioaccumulation potential; no long-term pollution to water and soil when disposed of properly; high concentration is corrosive to aquatic organisms and may cause temporary water body pH rise.

2.6 Other Hazards

No additional hazards identified; no aspiration hazard for liquid form under normal operation; corrosive to metal equipment and concrete surfaces, easy to cause equipment damage if not properly protected.

SECTION 3: Composition/Information on Ingredients

- **Substance / Mixture:** Alkaline functional complex (blend of monoethanolamine and thioglycolic acid derivative)
- **Main Components:** | Component | Content (w/w) | CAS-No. | Function | Hazard Classification |
--|---|---|---| | Monoethanolamine (main component) | 85.0~88.0% | 126-97-6 | pH adjuster/chelator/corrosion inhibitor | Skin Corr. 1B; Eye Dam. 1; STOT-SE 3 |
| Thioglycolic acid derivative | 2.0~5.0% | N/A | Synergistic chelator | Non-hazardous |
| Deionized Water | 7.0~13.0% | 7732-18-5 | Solvent | Non-hazardous |
- **Hazardous Components:** Only monoethanolamine is classified as hazardous (skin corrosion/serious eye damage); all impurities meet grade standard limits.

SECTION 4: First Aid Measures

4.1 Description of First-Aid Measures

- **If Inhaled (mist/vapour):** Move the victim to fresh air immediately, keep the respiratory tract unobstructed and at rest. If coughing, chest tightness or difficulty breathing occurs, give oxygen and consult a physician **immediately**; do not use artificial respiration if the victim has inhaled a large amount of mist.
- **In Case of Skin Contact:** Remove all contaminated clothing, gloves and shoes **immediately**; rinse the affected area with **plenty of running water** for 15 ~ 20 minutes (including skin folds and nails). Do not use neutralizing agents on the skin directly; apply a sterile anti-burn ointment if necessary, and seek medical attention for severe burns.
- **In Case of Eye Contact:** Do not rub eyes; pry open the upper and lower eyelids and rinse with **plenty of clean running water** for at least 20 minutes (rinse from inner to outer corner, keep eyes open during rinsing). Remove contact lenses if present and easy to do (do not touch the cornea). Consult an ophthalmologist **immediately** (even if no discomfort is felt).
- **If Swallowed:** Rinse the mouth with plenty of water immediately, **do not induce vomiting** (may cause corrosive damage to the esophagus and respiratory tract). Drink a small amount of milk or dilute acetic acid to neutralize the alkali (do not drink water in large quantities); call a poison control center or physician **immediately** for gastric lavage and treatment.

4.2 Most Important Symptoms and Effects

- **Acute Effects:** Severe skin redness, blistering and chemical burns; irreversible eye damage (corneal burn, vision loss); respiratory tract irritation, cough, sore throat and chest tightness; gastrointestinal burns, abdominal pain, nausea and vomiting (massive ingestion).
- **Delayed Effects:** Skin scarring after severe burns; long-term eye discomfort or vision impairment (untreated eye contact); no other known delayed toxic effects.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

No specific antidote; treat symptomatically (e.g., anti-burn, anti-inflammation, respiratory tract relief). Inform the physician of the product composition (85%+ monoethanolamine complex) if medical treatment is required; for skin and eye burns, use professional anti-chemical burn drugs.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

- **Suitable:** Water spray, foam, carbon dioxide (CO₂), dry powder; use large amounts of water to cool the container and dilute the product for large-scale fire.
- **Unsuitable:** No special limitations on extinguishing media; avoid direct high-pressure water jet (may cause liquid splashing and spread of corrosive liquid).

5.2 Special Hazards Arising from the Substance or Mixture

Non-flammable, no fire risk under normal conditions; decomposes at high temperature (>200°C) to produce ammonia gas (pungent odor, respiratory tract irritation) and non-toxic carbon dioxide, water vapor; corrosive to metal fire-fighting equipment at high temperature; no hazardous combustion gases or smoke generated.

5.3 Advice for Firefighters

- Wear **Level A personal protective equipment** (positive pressure self-contained breathing apparatus, chemical protective clothing, acid-alkali resistant gloves, face shield); fight the fire from the upwind direction and a safe distance.
- Cool the surrounding containers with plenty of water spray continuously to prevent high-temperature deformation and leakage; avoid contact with the corrosive liquid and decomposition fumes (ammonia gas).
- After the fire, ventilate the scene thoroughly; do not touch the residual liquid with bare hands; clean the fire site with water to dilute the residual corrosive liquid and neutralize with a small amount of dilute acid if necessary.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

- Wear **Level B personal protective equipment** (acid-alkali resistant chemical safety goggles, nitrile rubber gloves, anti-corrosive lab coat, face shield, gas mask); no unprotected personnel enter the spill area.
- Evacuate non-essential personnel; set up a warning zone with "Corrosive Alkaline Liquid, Wear PPE" signs; ensure good ventilation in the spill area to disperse mist/ammonia gas.
- Do not touch the spilled liquid with bare hands; do not walk through the spilled liquid to avoid corrosion of shoes and skin.

6.2 Environmental Precautions

- Do not discharge the spilled liquid directly into sewers, rivers, lakes or soil; use sandbags or dikes to contain the spilled liquid to prevent it from flowing into water bodies and soil.
- Neutralize the spilled liquid with a small amount of dilute acid (e.g., acetic acid, dilute hydrochloric acid) to pH 6.0 ~ 8.5 before disposal to reduce corrosivity and avoid water body pH rise; avoid excessive acid to prevent secondary pollution.

6.3 Methods and Materials for Containment and Cleaning Up

- **Small Spill:** Absorb the liquid with inert acid-alkali resistant materials (e.g., diatomite, anti-corrosive absorbent cotton); transfer the absorbed waste to a sealed HDPE drum, label the drum with "M.T.G (Monoeth) - Corrosive Alkaline Waste"; rinse the spill area with plenty of water, and collect the cleaning wastewater for centralized neutralization treatment.
- **Large Spill:** Contain the liquid with sandbags or acid-alkali resistant dikes; transfer the liquid to a sealed anti-corrosive HDPE drum/stainless steel drum with an anti-corrosive pump, label the drum with "M.T.G (Monoeth) - Corrosive Alkaline Liquid"; neutralize the remaining liquid on the ground with dilute acetic acid powder, then rinse with plenty of water, and collect the wastewater for industrial treatment.

6.4 Reference to Other Sections

For disposal of spilled waste, see Section 13; for personal protection, see Section 8; for storage of the recovered product, see Section 7.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

- Operate in a **well-ventilated acid-alkali resistant operation area**; install local exhaust ventilation (airflow rate ≥ 1.5 m/s) for large-scale use to collect mist/ammonia gas; use closed anti-corrosive equipment for mixing and transfer if possible.
- Do not mix with strong acids (HCl, H₂SO₄), strong oxidants (hydrogen peroxide, potassium permanganate) and metal powders at will to avoid violent exothermic reaction, gas release and performance loss.
- **Hygiene Measures:** Wash hands and face with soap and water thoroughly after handling; do not eat, drink or smoke in the operation area; provide dedicated acid-alkali resistant hand

washing facilities and emergency eye wash/shower equipment within 10 meters of the operation area.

- Use acid-alkali resistant tools (plastic, glass, 304/316 stainless steel) for handling; do not use carbon steel, iron and concrete containers/tools to avoid corrosion.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

- **Storage Conditions:** Store in a **cool, dry, well-ventilated acid-alkali resistant warehouse** at 5 ~ 30°C; avoid direct sunlight, high temperature (>35°C) and freezing (<0°C); keep the container tightly sealed with an acid-alkali resistant cover.
- **Incompatibilities:** Strong acids, strong oxidants, metal powders, ammonia water, food raw materials, cosmetic raw materials (unformulated) and drinking water.
- **Storage Class (TRGS 510):** 8 (Corrosive Liquids)
- **Shelf Life:** 18 months (unopened, under the specified storage conditions); use within 6 months after opening and seal the container tightly after each use.
- **Other:** Store in acid-alkali resistant pallets (plastic, stainless steel); keep away from heat sources and open flames; store separately from other chemicals with obvious separation; mark the storage area with "Corrosive Alkaline Chemicals" signs; store cosmetic grade and industrial grade products separately to avoid cross-contamination.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

- **Occupational Exposure Limit (OEL) for Monoethanolamine:**
 - China MAC: 8 mg/m³ (8h TWA)
 - US OSHA PEL: 10 ppm (25 mg/m³, 8h TWA)
 - EU OEL: 5 ppm (12 mg/m³, 8h TWA)
- **Biological Exposure Limit:** No relevant biological exposure limit for M.T.G complex at present.

8.2 Exposure Controls

- **Engineering Controls:** Install local exhaust ventilation at the operation point; use closed acid-alkali resistant mixing and transfer equipment; set up emergency eye wash and shower equipment within 10 meters of the operation area; use acid-alkali resistant floor and wall materials in the operation area.
- **Personal Protective Equipment (PPE):**
 - Eye/Face: Acid-alkali resistant chemical safety goggles (mandatory for all operations) + face shield (for large-scale handling and pouring); replace goggles if damaged.
 - Skin: Acid-alkali resistant nitrile rubber gloves (thickness ≥ 0.20mm), anti-corrosive lab coat, anti-corrosive apron, acid-alkali resistant boots; replace protective equipment if contaminated or damaged.
 - Respiratory: Half-face respirator with organic vapor/alkali gas filter for mist/ammonia gas handling; positive pressure self-contained breathing apparatus for large-scale spill or mist leakage.
 - Other: Acid-alkali resistant hair cap, disposable acid-alkali resistant sleeves; avoid wearing loose clothing and jewelry during operation.
- **Control of Environmental Exposure:** Do not discharge waste liquid and cleaning wastewater directly into the environment; neutralize to pH 6.0 ~ 8.5 before discharge; treat waste gas (ammonia gas) with alkali gas absorption device.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

a) Physical State: Liquid b) Color: Colorless to pale yellow c) Odor: Faint alkaline amine odor, no pungent smell d) Melting Point/Freezing Point: ≤ 0°C (freezes into solid, recovers after thawing) e) Initial Boiling Point and Boiling Range: 170 ~ 175°C (monoethanolamine boiling point) f) Flammability (Liquid/Gas): Non-flammable g) Upper/Lower Flammability or Explosive Limits: Not applicable h) Flash Point: > 90°C (Closed Cup) i) Autoignition Temperature: > 350°C j) Decomposition Temperature: > 200°C (decomposes into ammonia gas and organic compounds) k) pH Value (25°C): 8.0 ~ 10.0 l) Viscosity (25°C): 20 ~ 50 mPa·s m) Water Solubility: Fully miscible with water at any ratio; miscible with ethanol, propylene glycol; insoluble in non-polar organic solvents (toluene, xylene) n) Partition Coefficient (n-octanol/water): log Kow = -1.2 (monoethanolamine) o) Vapor Pressure (25°C): < 0.1 hPa (monoethanolamine vapor pressure) p) Density (25°C): 1.01 ~ 1.05 g/cm³ q) Relative Vapor Density: >1 (heavier than air) r)

Corrosivity: Corrosive to carbon steel, iron, concrete and aluminum at high concentrations)
Explosive Properties: Not explosive) Oxidizing Properties: None

9.2 Other Safety Information

The product freezes at low temperature ($<0^{\circ}\text{C}$), which is a physical change; thaw at room temperature ($5\sim 30^{\circ}\text{C}$) and stir evenly, the performance and active content remain unchanged, no impact on use; corrosive to metal equipment, it is recommended to use stainless steel (304/316), plastic or glass equipment for storage and handling; long-term contact with air will cause slight oxidation, and sealed storage is required.

SECTION 10: Stability and Reactivity

10.1 Chemical Stability

Stable under **recommended storage and use conditions ($5\sim 30^{\circ}\text{C}$, sealed)**; no decomposition, no chemical reaction; the chelating, pH adjustment and corrosion inhibition performance remains stable for a long time; stable in the pH range of 6.0 ~ 11.0.

10.2 Possibility of Hazardous Reactions

No hazardous reactions under normal storage and use conditions; no polymerization risk under any conditions (liquid or diluted solution); violent exothermic reaction occurs when mixed with strong acids in high concentration, which may cause splashing of corrosive liquid; reacts with strong oxidants to produce non-toxic salts and water.

10.3 Conditions to Avoid

High temperature ($>35^{\circ}\text{C}$), direct sunlight, freezing ($<0^{\circ}\text{C}$), long-term contact with air/oxygen, contact with strong acids/strong oxidants/metal powders, mixing with carbon steel/iron/concrete equipment.

10.4 Incompatible Materials

Concentrated hydrochloric acid, sulfuric acid, nitric acid, hydrogen peroxide, potassium permanganate, metal powders (Fe, Cu, Al), carbon steel, iron, concrete and ammonia water.

10.5 Hazardous Decomposition Products

Decomposes at $>200^{\circ}\text{C}$ to produce ammonia gas (respiratory tract irritation) and non-toxic carbon dioxide, water vapor and organic compounds; no other hazardous decomposition products; ammonia gas can be dispersed by ventilation and neutralized with dilute acid.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

- **Acute Toxicity:**
 - Oral (Rat, LD_{50}): 700 mg/kg bw (moderate toxicity, due to alkaline corrosivity)
 - Dermal (Rabbit, LD_{50}): 1200 mg/kg bw (moderate toxicity, due to skin corrosion)
 - Inhalation (Rat, LC_{50}): $> 5 \text{ mg/m}^3$ (4h exposure, mist) (mild respiratory tract irritation)
- **Skin Corrosion/Irritation:** Category 1B (Rabbit test); causes severe chemical burns and blistering on skin, irreversible damage in severe cases.
- **Serious Eye Damage/Eye Irritation:** Category 1 (Rabbit test); causes severe corneal burns and irreversible eye damage, may lead to vision loss.
- **Respiratory or Skin Sensitization:** No skin/respiratory sensitization (Guinea pig test); no allergic reaction to the human body for normal use with PPE.
- **Germ Cell Mutagenicity:** Ames test negative (no mutagenicity); no genotoxic effect.
- **Carcinogenicity:** IARC Class 3 (not classifiable as carcinogenic to humans); long-term use with PPE has no carcinogenic risk.
- **Reproductive/Developmental Toxicity:** No reproductive/developmental toxicity in animal studies; avoid contact during pregnancy/lactation (due to corrosivity).
- **Specific Target Organ Toxicity (Single/Repeated Exposure):** STOT-SE 3 (respiratory tract irritation); no other target organ toxicity for normal use with PPE.
- **Aspiration Hazard:** None (liquid form, low volatility, no aspiration risk under normal operation).

11.2 Additional Information

Toxicity is mainly caused by the alkaline corrosivity of monoethanolamine to skin, eyes and respiratory tract; no acute systemic toxicity at normal industrial use dosage (with PPE); long-term professional operation following safety guidelines has no significant adverse effects on the human body; avoid direct contact is the key to safe use. The thioglycolic acid derivative in the product has low content and no toxic effect.

SECTION 12: Ecological Information

12.1 Toxicity

- **Aquatic Organisms:**

- Zebrafish (LC₅₀, 96h): > 1000 mg/L (aqueous solution)
- Daphnia (EC₅₀, 48h): > 500 mg/L (aqueous solution)
- Green algae (EC₅₀, 72h): > 800 mg/L (aqueous solution)

- **Terrestrial Organisms:** Low toxicity to soil plants and microorganisms; neutralized M.T.G (pH 6-8) has no adverse effect on soil fertility, and monoethanolamine can be degraded by soil microorganisms.

12.2 Persistence and Degradability

Fully biodegradable in aquatic and soil environments (biodegradation rate >80% in 28d); monoethanolamine and thioglycolic acid derivative are degraded into non-toxic small molecular organic compounds and inorganic salts by microorganisms; no persistent organic pollution.

12.3 Bioaccumulative Potential

No bioaccumulation potential (high water solubility, low log Kow; all components can be metabolized by organisms); no biomagnification in the food chain; the product has no fat solubility and will not accumulate in animal and plant tissues.

12.4 Mobility in Soil

Moderate mobility; the liquid is adsorbed by soil organic matter, and the neutralized product can be degraded by soil microorganisms; no leaching into groundwater to cause pollution at normal dosage.

12.5 Results of PBT and vPvB Assessment

Not classified as PBT/vPvB (no persistence, no bioaccumulation, low toxicity to aquatic organisms).

12.6 Endocrine Disrupting Properties

No endocrine disrupting effect (in vitro/in vivo animal tests negative); the product has no estrogen/androgen activity and will not affect the endocrine system of organisms.

12.7 Other Adverse Effects

No known adverse ecological impacts at normal use dosage; high concentration (≥ 10000 mg/L) is corrosive to aquatic organisms and may cause temporary water body pH rise; neutralization before discharge can eliminate the impact; no eutrophication risk to water bodies.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

- **Product Waste/Expired Liquid:** Classified as **corrosive industrial liquid waste**; neutralize with dilute acid (acetic acid, dilute hydrochloric acid) to pH 6.0 ~ 8.5 first, then discharge to the industrial wastewater treatment system; or send to licensed hazardous waste treatment facilities for centralized treatment.
- **Spill Waste/Absorbent Material:** Collect the contaminated absorbent material into a sealed HDPE drum, label it as "Corrosive Alkaline Waste", and send it to licensed hazardous waste treatment facilities for disposal; do not dump it into the environment.
- **Packaging Waste:** Rinse the packaging (HDPE, stainless steel) with plenty of water to remove residual liquid, then neutralize the rinsing water; the clean acid-alkali resistant packaging can be recycled or disposed of as non-hazardous waste; cosmetic grade packaging is not reused to avoid cross-contamination.

13.2 Disposal Regulations

Comply with China's **Hazardous Waste Pollution Prevention and Control Law, Water Pollution Prevention and Control Law** and **Corrosive Chemicals Safety Management Regulation**; comply with EU REACH (EC 1907/2006) and US EPA hazardous waste disposal regulations; follow local corrosive waste disposal standards. Do not mix with non-hazardous waste for disposal; neutralize all corrosive waste before discharge or treatment.

SECTION 14: Transport Information

14.1 UN Number

ADR/RID: 3267; IMDG: 3267; IATA-DGR: 3267

14.2 UN Proper Shipping Name

ADR/RID: Corrosive liquid, alkaline, organic, n.o.s. (Monoethanolamine)IMDG: Corrosive liquid, alkaline, organic, n.o.s. (Monoethanolamine)IATA-DGR: Corrosive liquid, alkaline, organic, n.o.s. (Monoethanolamine)

14.3 Transport Hazard Class(es)

ADR/RID: 8; IMDG: 8; IATA-DGR: 8

14.4 Packaging Group

ADR/RID: II; IMDG: II; IATA-DGR: II

14.5 Environmental Hazards

ADR/RID: No; IMDG Marine Pollutant: No; IATA-DGR: No

14.6 Special Precautions for User

1. Transport by **Class 8 corrosive goods dedicated closed anti-corrosive vehicles**; no open transportation, no mixed loading with other goods.
2. Use acid-alkali resistant sealed packaging (HDPE plastic drum, 304/316 stainless steel drum); the packaging must meet the Class 8 corrosive goods packaging standards; affix "Corrosive" hazard labels and product identification on the packaging.
3. Avoid package collision, extrusion and leakage during transportation; prevent direct sunlight, rain, high temperature and freezing; transport temperature 5 ~ 35°C.
4. Do not transport with strong acids, strong oxidants, flammable and explosive materials, metal powders, food and drinking water; load and unload gently with anti-corrosive tools, no rough operation.
5. The transporter must hold a **hazardous chemicals transport qualification certificate**; the driver and escort must receive professional Class 8 corrosive goods safety training and hold valid certificates.
6. Take thermal insulation measures for low-temperature transport to prevent product freezing (freezing is a physical change, no impact on use after thawing).

14.7 Incompatible Materials for Transport

Same as Section 7.2; avoid transport with strong acids, strong oxidants, metal powders and ammonia water.

SECTION 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

• National Regulations (China):

- Hazardous Chemicals Safety Management Regulation (Class 8 corrosive chemicals)
- Corrosive Chemicals Storage and Transportation Safety Regulation
- Water Pollution Prevention and Control Law
- Occupational Disease Prevention and Control Law
- Cosmetic Safety Technical Specifications (2021 Version) (for cosmetic grade)

• International Regulations:

- GHS Classification (Rev. 9): Skin Corr. 1B, Eye Dam. 1, STOT-SE 3
- EU REACH (EC 1907/2006): Monoethanolamine listed in TSCA Inventory, no SVHC
- US TSCA: Monoethanolamine listed on the TSCA Inventory
- IMDG/IATA/ADR: Class 8 corrosive goods, UN 3267
- EU Cosmetics Regulation (EC 1223/2009): Approved cosmetic raw material (monoethanolamine, limited dosage)

- **Industry Standards:** Comply with industrial corrosion inhibitor/chelator quality standards and cosmetic raw material safety standards.

15.2 Other Regulations

- The product label and packaging must be marked with hazard pictograms, signal words, hazard statements, precautionary statements, product name, batch number, shelf life and manufacturer information in accordance with GHS and Chinese hazardous chemicals labeling regulations; cosmetic grade products must be marked with the corresponding grade logo and dosage limit.
- All batch production records, test reports and COA must be retained for ≥ 5 years in accordance with hazardous chemicals management requirements; cosmetic grade production workshops must meet GMP clean standards.
- The production, storage and transportation of the product must comply with ISO 9001 and ISO 14001 system standards, and the waste water, gas and residue must meet the national emission standards.

SECTION 16: Other Information

16.1 Further Information

This MSDS is based on current scientific and industrial knowledge, complying with GB/T 16483, GB/T 17519, GHS Rev.9 and international Class 8 corrosive chemicals safety standards. It is intended for the safe handling, storage, transport and disposal of M.T.G (Monoeth). The supplier is not liable for any personal injury, property damage or environmental pollution caused by improper handling, non-compliance with storage/transport/disposal requirements, unauthorized use or failure to follow safety precautions.

16.2 MSDS Validity

This MSDS is valid for 3 years from the revision date (22 FEB 2026) unless the product formula, concentration or hazard information changes.

16.3 Technical Support

For product application (formulation optimization, dosage calculation, corrosion inhibition/chelation scheme design), on-site construction guidance and safety use training, contact the functional additives technical department at +86-021-50350029 ext. 822.

16.4 Key Reminder

This product is a monoethanolamine-thioglycolic acid derivative complex (main component 85%+ monoethanolamine), a Class 8 corrosive chemical with alkaline corrosivity. Strictly follow the safety operation procedures, wear qualified acid-alkali resistant PPE during handling; store in a dedicated acid-alkali resistant warehouse, and transport as Class 8 corrosive goods; neutralize the waste liquid to pH 6.0~8.5 before discharge to avoid environmental pollution; the product freezes at low temperature, which is a normal physical change, and can be thawed at room temperature for use without affecting performance. Cosmetic grade products must be used in accordance with the specified dosage limit to ensure mildness and safety.

